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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XII No. 11
November 1988

Unemployment Rate

Seasonally Adjusted
September*

ARIZONA	6.6%
Maricopa County	5.4%
Pima County	5.4%
UNITED STATES	5.4%

Consumer Price Index

U.S. - August 1988
Base = 1982-84

Wage Earner/Clerical Worker -	117.7
% Chg. Year Ago	3.9
All Urban -	119.0
% Chg. Year Ago	4.0

Phoenix - 2nd Qtr 1988
Base = 1982-84

All Urban -	119.9
% Chg. Year Ago	3.8

Tucson - 2nd Qtr 1988
Base = 1982-84

All Urban -	119.8
% Chg. Year Ago	0.9

*Preliminary

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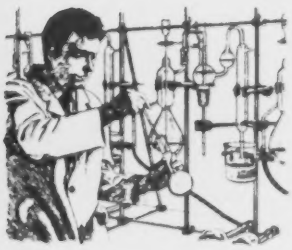
Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Metropolitan Counties Benefit from State's Growing Industries

Fifty-five of Arizona's industries grew in employment in the first two-thirds of the 1980s, while four declined, according to a study by the Research Administration of the Arizona Department of Economic Security.

The annual study of nongovernmental and nonagricultural industries at the two-digit Standard Industrial Classification (SIC) level revealed several trends within the state's 15 counties. (See pages 3 and 4 for detailed information.) As expected, the diverse metropolitan counties contained the greatest number of growing industries; Maricopa County with 33, and Pima with 25. Among nonmetropolitan counties, Mohave had 17 growing industries, followed closely by Coconino and Yavapai, each with 16. Only Greenlee County had no industries with steady growth.



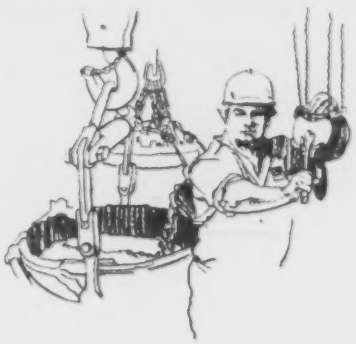
To perform the study, industry data in Unemployment Insurance (UI) files from mid-1980 through mid-1987 were examined. A seven-year period was chosen to help negate the effects of the business cycle. Since most employers are required to report their employment levels for UI purposes, this source of data is considered reliable. Because of a time lag in data availability, however, results were supplemented with information from various periodicals.

Service-producing industries clearly dominated the growing industry list with 37 increasing, compared to 18 industries rising in the goods-producing sector. Health services grew in the most counties (12), followed by business services in 10 counties.

Health-services employment continued to grow in Arizona as the population age rose and the demand for health care increased. Fast population growth due to in-migration also played a factor.

Among industries included in business services are temporary help, data processing, advertising, and janitorial services. These services play an important role in high-growth states such as Arizona.

Among declining industries, metal mining -- especially in copper -- had the poorest performance, but it improved in the last year. A decline of metal mining in five counties and a decrease in primary metals manufacturing (smelting) in two counties indicated a leveling off of employment losses in copper-producing areas. Last year's study revealed a decline of copper mining in eight counties and smelting in four counties.



Statewide, Pima County had the greatest number of declining industries with three: leather and leather products manufacturing, metal mining, and primary metals manufacturing.

Lists of occupations in growing and declining industries are available by writing to the address on the back of this newsletter or by calling (602) 542-3871.

--Barbara Keene

GROWING INDUSTRIES

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Agricultural Services							x			x					x
Amusement and Recreation Services (Except Motion Pictures)							x	x		x	x				
Apparel and Accessory Stores							x				x				
Automotive Dealers and Gasoline Service Stations (Retail Trade)	x	x				x	x								x
Automotive Repair, Services, and Garages		x	x				x	x	x	x	x		x		
Banking								x	x				x		
Building Materials, Hardware, Garden Supply, and Mobile Home Dealers (Retail Trade)	x			x		x	x	x							
Business Services		x	x	x			x	x	x	x	x		x	x	
Chemicals and Allied Products Manufacturing										x					
Communication						x									
Construction -- General Contractors						x							x		
Construction -- Special Trade Contractors		x	x					x			x		x	x	
Eating and Drinking Places		x	x				x	x	x	x	x		x		
Educational Services							x								
Electrical and Electronic Machinery, Equipment, and Supplies (Manufacturing)		x								x		x			
Electric Gas, and Sanitary Services									x						x
Fabricated Metal Products Manufacturing										x					
Finance															x
Food and Kindred Products Manufacturing										x					
Food Stores			x				x		x	x	x				
Furniture and Fixtures Manufacturing										x					
Furniture, Home Furnishings, and Equipment Stores						x	x						x		
General Merchandise Stores			x		x		x	x			x				x
Health Services	x	x	x	x	x		x	x	x		x	x	x	x	
Holding and Other Investment Offices										x					
Hotels, Rooming Houses, Camps, and Other Lodging Places (Services)	x						x		x	x	x				
Insurance			x								x				x
Insurance Agents, Brokers, and Service								x		x					
Leather and Leather Products Manufacturing							x								
Legal Services			x				x	x		x			x		
Lumber and Wood Products (Except Furniture) Manufacturing							x	x					x		
Machinery (Except Electrical) Manufacturing															x
Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks Manufacturing			x							x					

GROWING INDUSTRIES (Cont.)

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Miscellaneous Manufacturing							x	x							
Miscellaneous Retail Trade			x				x	x		x			x	x	
Miscellaneous Services		x	x				x	x		x			x		
Motion Pictures							x			x					
Motor Freight Transportation and Warehousing		x					x		x	x					
Museums, Art Galleries, Botanical and Zoological Gardens (Services)							x								
Paper and Allied Products Manufacturing							x							x	
Personal Services							x				x				
Primary Metals Manufacturing													x		
Printing, Publishing, and Allied Industries			x		x		x	x		x	x		x		
Private Households (Services)							x			x					
Real Estate	x														
Rubber and Miscellaneous Plastics Products Manufacturing							x								
Security and Commodity Brokers, Dealers, Exchanges, and Services										x					
Social Services		x					x			x					
Stone, Clay, Glass, and Concrete Products Manufacturing							x							x	
Transportation by Air								x							
Transportation Equipment Manufacturing			x				x								
Transportation (Except Railroads)			x												
Transportation Services		x													
Wholesale Trade -- Durable Goods		x	x				x		x				x		
Wholesale Trade -- Nondurable Goods							x	x					x		

DECLINING INDUSTRIES

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Apparel Manufacturing															x
Leather and Leather Products Manufacturing											x				
Metal Mining		x		x	x	x					x				
Primary Metals Manufacturing						x					x				

Reader Input Sought for Makeup of Industry Groups

The Department of Economic Security, Research Administration, is seeking input from *LMI Newsletter* readers on the makeup of industrial categories for Arizona's Nonagricultural, Wage and Salary Employment data. This information is published monthly in the newsletter under the heading, "Arizona Labor Force and Employment." (See pages 8-10.)

The published categories have remained the same for many years. But Research Administration believes it's time to review and consider revising some categories due to the recent updating of industrial classifications by the U.S Office of Management and Budget, and to more accurately reflect the major areas of the state's economy.

Data for Nonagricultural, Wage and Salary Employment are calculated in each state through the Current Employment Statistics (CES) program, sponsored by the U.S. Bureau of Labor Statistics (BLS). Each month, Research Administration, which runs Arizona's CES program, conducts a survey of employers to estimate employment by industry in each county. The county figures are then added to produce statewide totals.

The published Arizona CES data are based on groupings of Standard Industrial Classification (SIC) Manual categories. The SIC classification system breaks down each major U.S. industry into four levels: division (the highest), two-digit industry codes, three-digit industry codes, and four-digit industry codes. The more digits, the more detailed a classification within an industry.

Currently, Arizona publishes data for nonmetropolitan counties at basically the SIC division level, and primarily the two-digit level for metropolitan counties and the state as a whole.

The SIC Manual had a major revision in 1987 for the first time in 15 years. The changes were needed, according to the Office of Management and Budget, to reflect "technological changes, institutional changes such as deregulation in the banking, communications, and transportation industries; and the tremendous expansion in the service sector. ..." (See December 1986 *LMI Newsletter* for additional information on the SIC changes.) The SIC changes will be incorporated into the CES program in January 1990.

Although the SIC revision will not affect most of the published CES data in Arizona, the changes may cause a break in series within some industrial categories. Any time there is a coding change or other major change in categories, there is a loss of historical continuity, which can have an impact on many organizations and individuals. In addition, there would be some impact on this office in terms of CES sample selection and, possibly, sample size.

Some of the current industrial groupings published may no longer be significant, while other industrial categories may have become more prominent. Some examples of possible changes in CES data in the *LMI Newsletter* are:

- Divide Machinery into two subgroups: "Electrical Machinery" and "Nonelectrical Machinery."
- Under Services and Miscellaneous, break out "Temporary Employment Services" from "Business Services."
- Under Government, divide "State and Local" into two separate categories.

- Under Manufacturing, combine "Apparel" with "All Other Nondurable Goods."

- Under Mining and Quarrying, combine "Copper Mining" with "Other Mining and Quarrying."

The BLS needs to know of changes to 1990 data publication categories as soon as possible. If you have any suggestions concerning the publication of employment data by industry, please call (602) 542-3871, or send any suggestions to the address on the back of this newsletter.

--Vic Conti

Occupation Handbook Provides Glimpse at Job Market Future

Researching a future occupation? Planning to change careers? Unsure of qualifications for a job? Answers to these questions -- and much more -- can be found in the 1988-89 edition of the *Occupational Outlook Handbook*.

Published for more than 40 years by the U.S. Department of Labor's Bureau of Labor Statistics (BLS), the 18th edition focuses on the job outlook through the year 2000. Among the highlights are: in-depth profiles of 250 occupations, including current and future job and earnings potential; easy-to-read graphs and tables illustrating the handbook's major points; and an appendix that gives employment information on 125 other occupations, tells how the handbook's projections were made, and provides sources for state and local job-outlook data.

In addition, two other chapters give supporting information. "Where To Go for More Information" tells where other sources of information are located, and offers tips on interviewing and writing a resume. And an introductory chapter helps readers get around the handbook's 458 pages and explains the format used in analyzing occupations.

The heart of the BLS guide, however, -- nearly 400 pages -- is the job profiles. From architects to zoologists, the handbook breaks down individual occupations by focusing on several primary areas: type of work and conditions, required training and qualifications, current and future employment outlook, earnings potential, related occupations, and sources of additional information.

The *Occupational Outlook Handbook* is available in soft cover ($22) and hard cover ($24) by sending checks or money orders, made payable to the Superintendent of Documents, to one or the following addresses: Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402; or BLS Publications Sales Center, P.O. Box 2145, Chicago, Ill. 60690. Those ordering directly from the Superintendent of Documents may also use VISA or Master Card. (Include card number and expiration date.)

The Arizona Labor Force in September

After substantial increases in the unemployment rate during July and August, the economy stabilized in September. Led nearly exclusively by the return of students for the fall semester, Arizona's unemployment rate eased in September to 6.6 percent, one-tenth of a percentage point below the previous month's rate.

Although the number of unemployed declined, it was only slightly greater than what is usually ex-

pected this time of the year. Job growth in September, however, was consistent with seasonal changes and the trends that have been experienced throughout 1988.

Manufacturing and Construction continued to experience economic weakness while Retail Trade and the school systems added a significant number of jobs. But unfortunately, the underlying trend of the economy remains generally flat with insufficient job creation to meet the growing population of the state.

In Manufacturing, employment for September rose by 400 as losses in durable goods sectors were more than offset by seasonal gains in nondurable sectors. The closely watched high-technology industries of aerospace and electronics showed no change in employment in September and are up about 600 jobs compared to a year ago.

This lackluster employment growth bodes poorly for the future. While the national economy has recently experienced a resurgence due to improvement in Manufacturing, Arizona has not shared in that prosperity. And unless recent trends are reversed, Manufacturing will continue to experience slow job creation.

Beginning in April and continuing through the summer, Construction enjoyed a steady expansion. During that period, 2,800 jobs were added. But, as expected, September recorded the first losses as seasonal projects were completed and employers reduced their work forces.

A total of 700 jobs in Construction were lost in September with nearly all of the reductions recorded in the Phoenix and Tucson metropolitan areas. Cooler weather in the northern counties and high vacancy rates in the metropolitan areas point to continuing drops in Construction employment in the coming months. As we look ahead to 1989 and 1990, little change is expected.

While September is too early for the state to receive significant benefits from the tourism industry, it is a time when the opening of school for the fall semester generates substantial business in Retail Trade. This year was no exception to that trend as department stores and related businesses saw an increase in employment. Added to that growth was the rise of jobs in restaurants on and off campus.

Retail Trade employment expanded by 1,600 jobs in September while Services added an additional 200 workers. In the months ahead the staffing of new resorts and the arrival of winter tourists will be a much needed source of job creation.

As usual in September, the beginning of the new semester accounted for nearly all of the recorded job creation in Arizona. Schools produced 27,000 jobs and were responsible for nearly all of the net gain in August of 25,500 jobs. Most of these positions were the return of faculty and staff who are not contracted for a full year, and students involved in work-study programs.

For more than a year, Arizona has experienced a substantially weakened economy. But there is no reason for panic. While a good case could be made that the real estate industry is in a recession, such is not the case for the economy in general.

Unless there is a recession nationally or the problems in real estate invade the rest of the economy, Arizona can expect to see slow, but positive, job growth in the months ahead. And our rising unemployment rate will begin to slow as people who anticipate moving to the state recognize our lack of job creation.

--Dan Anderson

Arizona Labor Force and Employment

September 1988 (in thousands)

	Arizona				
				Amount Change	
	Sep.* 1988	Aug. 1988	Sep. 1987	Aug.- Sept.	1987- 1988
TOTAL CIVILIAN LABOR FORCE**	1671.5	1634.5	1607.8	+37.0	+63.7
Total Unemployment	109.6	113.6	94.5	-4.0	+15.1
Rate	6.6	7.0	5.9	----	----
Rate (Sea. Adj.)***	6.6	6.7	5.9	----	----
Total Employment	1561.9	1520.9	1513.3	+41.0	+48.6

The Above Labor Force Statistics Should No

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1405.4	1379.9	1390.2	+25.5	+15.2
Manufacturing	189.7	189.3	188.4	+0.4	+1.3
Durable Goods	146.0	146.3	146.0	-0.3	+0.0
Stone, Clay, and Glass	7.3	7.3	8.0	+0.0	-0.7
Primary and Fabricated Metals	16.0	16.0	16.1	+0.0	-0.1
Primary Metals	7.3	7.3	7.3	+0.0	+0.0
Fabricated Metals	8.7	8.7	8.8	+0.0	-0.1
Machinery	65.7	65.7	64.5	+0.0	+1.2
Other Durable Goods	57.0	57.3	57.4	-0.3	-0.4
Aircraft and Missiles	26.3	26.3	26.9	+0.0	-0.6
Lumber and Wood Product (Excluding Furniture)	8.7	8.7	8.5	+0.0	+0.2
All Other Durable Goods	22.0	22.3	22.0	-0.3	+0.0
Nondurable Goods	43.7	43.0	42.4	+0.7	+1.3
Food and Kindred Products	9.6	9.4	9.3	+0.2	+0.3
Apparel	4.6	4.6	4.7	+0.0	-0.1
Printing and Publishing	16.2	16.3	16.2	-0.1	+0.0
All Other Nondurable Goods	13.3	12.7	12.2	+0.6	+1.1
Mining and Quarrying	12.3	12.3	11.6	+0.0	+0.7
Copper Mining	9.2	9.2	8.6	+0.0	+0.6
Other Mining and Quarrying	3.1	3.1	3.0	+0.0	+0.1
Construction	96.0	96.7	102.4	-0.7	-6.4
Trans., Communications, & Public Utilities	72.7	72.8	73.0	-0.1	-0.3
Transportation	36.7	36.7	36.5	+0.0	+0.2
Communications and Public Utilities	36.0	36.1	36.5	-0.1	-0.5
Trade	342.9	341.3	337.8	+1.6	+5.1
Wholesale Trade	68.0	68.0	68.2	+0.0	-0.2
Retail Trade	274.9	273.3	269.6	+1.6	+5.3
General Merchandise and Apparel	41.9	41.7	43.0	+0.2	-1.1
Food Stores	45.7	45.2	43.0	+0.5	+2.7
Automotive and Service Stations	33.3	33.5	32.5	-0.2	+0.8
Eating and Drinking Places	98.2	97.4	95.3	+0.8	+2.9
Other Retail Trade	55.8	55.5	55.8	+0.3	+0.0
Finance, Insurance, and Real Estate	91.6	92.1	95.2	-0.5	-3.6
Services and Miscellaneous	355.8	355.6	345.5	+0.2	+10.3
Hotels and Other Lodging Places	39.0	38.3	35.9	+0.7	+3.1
Business Services	76.5	76.8	76.2	-0.3	+0.3
Health Services	91.1	91.0	87.0	+0.1	+4.1
Other Services	149.2	149.5	146.4	-0.3	+2.8
Government	244.4	219.8	236.3	+24.6	+8.1
Federal	43.5	43.4	43.5	+0.1	+0.0
State and Local	200.9	176.4	192.8	+24.5	+8.1
School	114.2	87.2	111.0	+27.0	+3.2

* Preliminary

** Labor force, unemployment, and employment are reported by place of residence.

*** Normal seasonal variations have been eliminated to reflect underlying economic trends.

September 1988 (in thousands)

MARICOPA COUNTY					PIMA COUNTY				
			Amount Change					Amount Change	
Sep.* 1988	Aug. 1988	Sep. 1987	Aug.- Sep.	1987- 1988	Sep.* 1988	Aug. 1988	Sep. 1987	Aug.- Sep.	1987- 1988
1035.1	1014.8	998.7	+20.3	+36.4	317.5	308.6	304.5	+8.9	+13.0
55.6	54.8	48.7	+0.8	+6.9	16.8	16.5	14.5	+0.3	+2.3
5.4	5.4	4.9	----	----	5.3	5.3	4.8	----	----
5.4	5.3	4.9	----	----	5.4	5.3	4.8	----	----
979.5	960.0	950.0	+19.5	+29.5	300.7	292.1	290.0	+8.6	+10.7

Be Used for Economic Assistance Programs

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

924.8	912.0	915.7	+12.8	+9.1	247.2	241.1	243.2	+6.1	+4.0
138.6	138.2	136.5	+0.4	+2.1	30.1	30.2	31.1	-0.1	-1.0
107.8	107.9	106.8	-0.1	+1.0	24.3	24.5	25.5	-0.2	-1.2
4.8	4.8	5.3	+0.0	-0.5					
10.9	11.0	10.8	-0.1	+0.1					
52.1	52.0	51.3	+0.1	+0.8					
40.0	40.1	39.4	-0.1	+0.6					
30.8	30.3	29.7	+0.5	+1.1	5.8	5.7	5.6	+0.1	+0.2
6.3	6.2	6.1	+0.1	+0.2					
3.6	3.6	3.4	+0.0	+0.2					
11.3	11.4	11.5	-0.1	-0.2					
9.6	9.1	8.7	+0.5	+0.9					
0.6	0.6	0.6	+0.0	+0.0	1.8	1.8	1.6	+0.0	+0.2
64.2	64.7	68.8	-0.5	-4.6	18.5	18.6	19.4	-0.1	-0.9
50.2	50.3	50.1	-0.1	+0.1	9.5	9.4	9.5	+0.1	+0.0
26.7	26.8	26.3	-0.1	+0.4	4.6	4.6	4.7	+0.0	-0.1
23.5	23.5	23.8	+0.0	-0.3	4.9	4.8	4.8	+0.1	+0.1
231.5	230.4	229.4	+1.1	+2.1	57.0	56.8	55.0	+0.2	+2.0
53.9	54.0	54.2	-0.1	-0.3	8.2	8.3	7.8	-0.1	+0.4
177.6	176.4	175.2	+1.2	+2.4	48.8	48.5	47.2	+0.3	+1.6
26.8	26.6	28.0	+0.2	-1.2	7.1	7.2	7.4	-0.1	-0.3
29.3	28.8	27.6	+0.5	+1.7	7.8	7.7	7.1	+0.1	+0.7
20.6	20.8	20.1	-0.2	+0.5	5.8	5.8	5.4	+0.0	+0.4
63.0	62.5	61.0	+0.5	+2.0	18.1	17.9	17.5	+0.2	+0.6
37.9	37.7	38.5	+0.2	-0.6	10.0	9.9	9.8	+0.1	+0.2
72.9	73.3	75.4	-0.4	-2.5	12.1	12.2	12.7	-0.1	-0.6
240.3	239.8	232.6	+0.5	+7.7	66.0	66.0	64.3	+0.0	+1.7
22.4	21.7	19.9	+0.7	+2.5	6.2	6.1	6.4	+0.1	-0.2
61.0	61.3	61.2	-0.3	-0.2	11.0	11.1	10.7	-0.1	+0.3
60.1	60.0	57.2	+0.1	+2.9	19.3	19.4	18.4	-0.1	+0.9
96.8	96.8	94.3	+0.0	+2.5	29.5	29.4	28.8	+0.1	+0.7
126.5	114.7	122.3	+11.8	+4.2	52.2	46.1	49.6	+6.1	+2.6

NOTE: Prepared by the Arizona Department of Economic Security, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Nonmetropolitan Counties
Labor Force and Employment
September 1988

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
CIVILIAN LABOR FORCE*	15,550	35,750	43,500	13,100	9,000	3,100	5,150
Total Unemployment	2,250	2,875	3,350	1,475	900	300	525
Rate	14.5%	8.0%	7.7%	11.3%	10.0%	9.7%	10.2%
Rate (Seas. Adj.)**	16.0%	8.5%	8.6%	11.9%	10.1%	9.9%	9.5%
Total Employment	13,300	32,875	40,150	11,625	8,100	2,800	4,625

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS

TOTAL WAGE AND SALARY	15,550	25,000	39,175	10,825	5,450	2,925	3,325
Manufacturing	825	1,375	2,850	1,300	225	75	300
Mining & Quarrying	50	100	175	1,325	0	1,600	50
Construction	1,050	1,150	1,725	625	225	200	175
T.C.P.U.	1,900	1,600	2,450	375	150	50	75
Trade	1,575	5,300	9,175	2,425	1,600	225	1,075
F.I.R.E.	325	675	775	275	100	25	100
Services & Misc.	4,525	4,500	10,425	1,875	925	125	775
Government	5,300	10,300	11,600	2,625	2,225	625	775

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	31,850	26,850	37,450	10,525	37,400	49,600
Total Unemployment	2,200	2,925	3,525	2,000	2,100	12,700
Rate	6.9%	10.9%	9.4%	19.0%	5.6%	25.6%
Rate (Seas. Adj.)**	7.1%	12.2%	9.4%	16.8%	5.8%	22.8%
Total Employment	29,650	23,925	33,925	8,525	35,300	36,900

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS

TOTAL WAGE AND SALARY	22,025	20,350	29,350	8,875	25,100	25,475
Manufacturing	3,050	1,900	3,775	1,325	2,325	1,725
Mining & Quarrying	325	1,200	3,950	0	950	100
Construction	1,700	1,175	1,400	300	2,200	1,450
T.C.P.U.	1,225	1,825	900	500	850	1,100
Trade	6,275	4,125	5,150	3,400	6,650	7,425
F.I.R.E.	950	375	775	375	1,000	875
Services & Misc.	4,875	4,700	4,000	1,375	5,550	5,850
Government	3,625	5,050	9,400	1,600	5,575	6,950

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.
** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities
F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987
Manufacturing	410.41	406.14	401.60	41.0	40.9	40.2	10.01	9.93	9.99
Aircraft & Missiles	INA	INA	529.94	INA	INA	42.6	INA	INA	12.44
Food & Kindred Prod.	333.37	334.80	403.52	38.9	40.0	42.7	8.57	8.37	9.45
Primary Metals	525.76	492.54	472.55	39.8	38.6	36.1	13.21	12.76	13.09
Machinery	417.77	415.95	388.44	40.6	40.9	39.0	10.29	10.17	9.96
Copper Mining	514.14	507.98	503.66	41.0	40.9	40.1	12.54	12.42	12.56
Construction	425.96	426.82	406.56	36.5	36.7	35.2	11.67	11.63	11.55
Utilities	643.68	650.25	577.60	43.2	42.5	40.0	14.90	15.30	14.44
Retail Trade**	250.24	248.16	256.79	33.1	33.4	33.7	7.56	7.43	7.62
Wholesale Trade	386.89	398.34	386.31	39.6	40.4	39.1	9.77	9.86	9.88

Estimated Hours and Earnings of Production Workers in Selected Industries Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987
Manufacturing	446.68	433.88	434.02	42.5	41.8	41.1	10.51	10.38	10.56
Construction	442.38	445.38	416.75	36.5	36.9	34.7	12.12	12.07	12.01
Retail Trade**	274.70	273.14	279.14	33.5	34.1	34.0	8.20	8.01	8.21
Wholesale Trade	413.29	425.80	388.32	40.4	41.1	38.6	10.23	10.36	10.06

Estimated Hours and Earnings of Production Workers in Selected Industries Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987	Sep.* 1988	Aug. 1988	Sep. 1987
Manufacturing	384.07	378.74	353.73	39.8	39.7	38.2	9.65	9.54	9.26
Copper Mining	591.16	598.88	526.26	42.9	42.9	41.8	13.78	13.96	12.59
Construction	384.73	381.55	360.63	37.1	36.9	35.6	10.37	10.34	10.13
Utilities	582.36	597.82	554.60	42.2	42.1	40.9	13.80	14.20	13.56

* Preliminary
** Excludes eating and drinking places

NOTE: These estimates are based on a sample of full-time and part-time production and related employees whose payroll and hours are reported for the pay period that includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs September 1988

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,671,451	1,561,901	109,550	6.6%
Apache	15,543	13,301	2,242	14.4
Cochise	35,752	32,870	2,882	8.1
Coconino	43,493	40,145	3,348	7.7
Gila	13,096	11,623	1,473	11.2
Graham	8,991	8,093	898	10.0
Greenlee	3,095	2,790	305	9.9
La Paz	5,145	4,618	527	10.2
Maricopa	1,035,129	979,502	55,627	5.4
Mohave	31,857	29,656	2,201	6.9
Navajo	26,837	23,919	2,918	10.9
Pima	317,519	300,714	16,805	5.3
Pinal	37,454	33,921	3,533	9.4
Santa Cruz	10,522	8,531	1,991	18.9
Yavapai	37,407	35,308	2,099	5.6
Yuma	49,611	36,909	12,702	25.6

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

New Developments

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the LMI Newsletter is not responsible for incorrect information reported from these sources.

MANUFACTURING - **Garrett Turbine Engine Co.** and **Hughes Aircraft** Co. were awarded in October nearly $10 billion in defense-related contracts. Garrett, which employs about 4,000 people at its Phoenix plant, will produce 5,000 engines, worth about $2 billion, for the Army's new light-attack and reconnaissance (LHX) helicopters. Garrett is expected to hire an additional 300 employees at its Phoenix and Indianapolis plants when it begins production of the T800 engine in the mid-1990s. Tucson, meanwhile, will benefit from a $7.5 billion contract Hughes won to manufacture 24,000 Advanced Medium-Range Air-to-Air Missiles (AMRAAM) during the next 10 years. From 800 to 1,000

production personnel are expected to be hired to build the AMRAAM, which is designed to counter the newest generation of Soviet fighters and bombers.

GenRad Inc. announced it will be closing its Small Systems Test Operations at 14841 N. Black Canyon Highway in Phoenix, costing around 100 employees their positions. The Phoenix operation, which makes integrated software systems and automatic test equipment, will be consolidated with GenRad's printed circuit board test systems in Concord, Mass.

Seventy-nine employees of *The Arizona Republic* and *Phoenix Gazette* have voluntarily retired. The parent company of the two newspapers, **Phoenix Newspapers Inc.**, which employs about 2,500 people, announced in early October it planned to eliminate 100 non-union positions through an early-retirement program and layoffs. The fate of 21 other positions in the news, advertising, circulation and business departments has not been decided.

A leading maker of generic drugs, Phoenix-based **Steris Laboratories Inc.**, opened a 125,000-square-foot plant in Phoenix in early November. The facility at 620 N. 51st Ave. employs 360 people, including microbiologists, chemists, engineers, set-up mechanics, computer specialists and production workers.

International Business Machines says that half of its 2 million-square-foot plant in Tucson will be turned into a business park. IBM announced in July it will end its manufacturing operations at the Rita Road facility by December 1989, eliminating 2,800 positions. About 2,200 people working at the General Products Laboratory and in marketing and service positions around Tucson are not affected by the cutbacks. Between five and seven of 11 buildings affected by the shutdown will be available for leasing.

CONSTRUCTION - Housing starts by the 10 largest home builders in Phoenix declined 20 percent in the first three-quarters of the year. A total of 11,168 homes were started in the first nine months of 1988, compared to 13,390 for the same period a year ago. Only Continental Homes and Richmond American Homes started more houses than in the previous period last year. The number of active builders in the Valley has dropped from 495 in 1987 to 275 in 1988.

Kraft Inc. of Glenview, Ill., plans to build a $6.5 million office/warehouse at 47th Avenue and Buckeye Road in Phoenix. The 175,000-square-foot project, which will take seven months to finish, will include 15,000 square feet of office space and 82,000 square feet of cooler and freezer space. The multinational food products company was recently bought by Philip Morris Cos. Inc. for $11 billion.

Construction is set to begin at year's end for an upscale warehouse project for small businesses and artisans in Mesa. Tempe developer **J.L. Springer Inc.** plans to use split-face brick and Georgia marble in building the $8 million, 200,000-square-foot project on First Avenue, one block east of Dobson Road. The facility will have 145 units and feature 25-foot-high ceilings.

SunCor Development Co., a subsidiary of Pinnacle West Capital Corp., will build a 450,000-square-foot shopping center in Tempe in early 1989. Price Club, a discount, member-only retail store, will anchor the 38-acre project at Elliot Road and Priest Drive.

TRANSPORTATION, COMMUNICATIONS and PUBLIC UTILITIES - While certain areas of the state's economy are depressed, aviation appears to be fly-

ing high. Work has begun on **Terminal 4** of **Sky Harbor International Airport** in Phoenix, which is designed to accommodate 30 million passengers a year. America West Airlines will be the primary tenant of the $170 million, six-story terminal, scheduled to open in October 1990. Also, the FAA cleared a path for the building of a 7,500-foot runway at the **Bullhead/Laughlin Airport**, which will open the way for jet service. The FAA said the runway would not severely affect the area's environmental quality. Besides the runway, $14 million in federal grants are being sought for a taxiway and associated equipment.

A proposed merger between **Tucson Electric Power Co.** and San Diego Gas & Electric Co. ended when the two utilities were unable to reach agreement on a plan to block efforts of a hostile-takeover of San Diego Gas by Southern California Edison Corp. Tucson Electric, third-largest utility in Arizona, is expected to receive a $25 million penalty payment from San Diego Gas if the buy-out bid by Southern California Edison is successful. Southern California Edison launched a $2.2 billion hostile-takeover bid for San Diego Gas in October.

Pinnacle West Capital Corp. recently announced a 30 percent drop in net income for the period ending Sept. 30, compared to the same period in 1987. Pinnacle West is a holding company for MeraBank, Arizona's largest thrift; Arizona Public Service Co., the state's largest utility; SunCor Development Co., one of the Valley's largest property owners; Malapai Resources Co., a uranium mining company; and El Dorado Investment Co., a venture capital company. A poor Valley commercial and residential real estate market was cited for the revenue drop by Pinnacle West.

The only independent television station owned by a Roman Catholic diocese in the United States closed November 1. **KDTU-TV (Channel 18)**, owned by the Roman Catholic Diocese of Tucson, laid off 40 full- and two part-time employees when it shut down operation due to the diocese's financial problems. The diocese, which has about 260,000 members in nine counties, had laid off 32 employees in the past year.

The Valley's oldest radio station, **KOY (550-AM)**, laid off 12 air staff when it recently changed from a news-talk to a nostalgic-music format. In a cost-cutting move expected to save $500,000, KOY let go its seven-person news staff and five talk-show hosts. The station's programming is being picked up over satellite, eliminating the need for local disc jockeys. KOY's sister station, KOY-FM, will continue its top-40 format, says Gary Edens, chairman of Edens Broadcasting, which owns both stations.

TRADE - Plans for construction of two Valley shopping centers and expansion of **Tucson Mall** were recently announced. **Scottsdale Pavilions**, a $40 million development at the northeastern corner of Indian Bend and Pima roads (on the Salt River Pima-Maricopa Indian Community), will feature more than 100 shops on 80 acres. Major tenants for the Estes Co. project -- which will have 25-foot waterfalls, five acres of lakes and 400 palm trees -- include Target, Home Depot, Ross, Miller's Outpost, and Cost Plus. In the far East Valley, **The Alameda Center at Superstition Springs** will have 310,000 square feet of retail space. A Target store will cover nearly half of the development's space. Groundbreaking for the retail center, being built by Wessex Cos. at Power Road and East Hampton Avenue, is scheduled for late 1989 or early 1990. Finally, the first new Goldwaters department store in eight years will highlight the $30 mil-

lion, 325,000-square-foot expansion of Tucson Mall. The two-story, 135,000-square-foot Goldwaters will take up the major portion of an east wing, which will also feature 90,000 square feet for specialty shops. Current tenant Dillard's will add 75,000 square feet to its store on the mall's north wing.

Two retail chains in the West have recently made their debut in Arizona. World Cycle Corp. of Dallas, which has 65 stores in five states, has opened 10 **World Cycle and Spoke Shop** outlets, six in the Valley and four in Tucson. The shops, which average 1,800 square feet, are geared toward adult bikers. **Savers**, a 32,800-square-foot department store, has opened at 2625 W. Bethany Home Road in Phoenix. Operated by TVI of Bellevue, Wash., Savers features the usual department store fare and offers more than 100,000 one-of-a-kind items, Savers President Tom Ellison says. Savers, which plans to open another Valley store by the end of 1989, has 40 stores in seven states and Canada.

FINANCE, INSURANCE and REAL ESTATE - The state Department of Insurance reports 2,494 insurance and service organization companies -- up from 2,397 -- were operating in Arizona in 1987. Included in the total were 120 domestic and 807 out-of-state life and disability insurers, 672 domestic life and disability reinsurance companies, and 30 domestic and 691 out-of-state property and casualty insurance companies.

Japanese investment in the Valley has fallen dramatically this year. According to a report by the accounting firm of Kenneth Leventhal & Co. of Los Angeles, Japanese firms have invested $40 million in the area in 1988, compared to $1.59 billion from 1985 to 1987.

SERVICES and MISCELLANEOUS - A new $800,000 visitor center at the **Boyce Thompson Southwestern Arboretum** in Superior opened in October. The center is the first phase of a building plan that includes a greenhouse and auditorium. The center has an orientation room, bookstore, gift shop, offices, and plant nursery.

The first phase of the 22.5-acre Camelback Esplanade -- the **Ritz-Carlton Hotel** -- opened recently at 2401 E. Camelback Road. The hotel offers 301 guest rooms and two dining rooms.

GOVERNMENT - The Arizona Legislature's **Joint Committee on Capital Review** has approved $86 million in construction projects. Among the projects OK'd were a $28 million Supreme Court building in Phoenix, a $26 million Department of Economic Security building in Phoenix, and a $15.6 million general state office building in Tucson.

Voters in **Gilbert** said yes in October to issuing $91.5 million in bonds to finance a new municipal complex, water and sewer improvements, parks and recreational facilities, street improvements, and new fire stations and fire equipment. The $24.3 million municipal complex will feature a council chamber, public-safety building and library.

GENERAL - Twenty-five companies are on the annual **Arizona 100** list for the first time, eight of which are in the construction business. The list of privately held companies is compiled by the accounting firm of Arthur Andersen & Co. and is based on revenues for fiscal year 1987. The top 10 businesses all had revenues of more than $100 million. They include: Shamrock Foods Co., Bar-S Foods Co., Gosnell Builders, Sundt Corp., Kaibab Industries, Kitchell Corp., United Dairymen of Arizona, Sun Land Beer Co., and Empire Southwest Co. The annual list has an average turnover rate of 25 percent, Arthur Andersen says.

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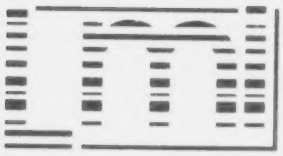

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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XII No. 12
December 1988

Unemployment Rate

Seasonally Adjusted
October*

ARIZONA	7.0%
Maricopa County	5.8%
Pima County	5.7%
UNITED STATES	5.3%

Consumer Price Index

U.S. - September 1988
Base = 1982-84

Wage Earner/Clerical Worker	118.5
% Chg. Year Ago	4.1
All Urban	119.8
% Chg. Year Ago	4.2

Phoenix - 3rd Qtr 1988
Base = 1982-84

All Urban	120.9
% Chg. Year Ago	4.1

Tucson - 3rd Qtr 1988
Base = 1982-84

All Urban	121.8
% Chg. Year Ago	2.0

*Preliminary

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

OIS Report Fills Information Gap With Self-Employment Data

Employment forecasts have long been criticized for not including the self-employed. Vocational educators, job trainers and career planners are at a disadvantage when the outlook for self-employed jobs is left out of occupation reports.

At last in Arizona there is relief from this problem. Using 1980 Census data, the microcomputer Occupational Information System (OIS) of Arizona, sponsored by the Arizona State Occupational Information Coordinating Committee (ASOICC), has added information on the self-employed in its latest report, "Year 2000 Employment Projections -- State of Arizona -- With Estimates of Self-Employment."

Certainly it makes sense to consider self-employment as an option for job training, or for all or part of one's life work. Few wage-and-salary jobs offer the same degree of independence that self-employment can offer. Few are more demanding of self-discipline, high skill, entrepreneurial ability, and dedicated action. In fact, entrepreneurial ability is probably as important to the success of the self-employed as the specific job skill.

One positive aspect of self-employed occupations -- from a job-training and vocational education point of view -- is that they can lead to employment of others. For example, a self-employed barber may open a shop in a growing area, find demand for his service to be greater than he alone can supply and hire another barber to take on the surplus.

(Continued on Page 3)

2000 Job Forecast Covers 750 Occupations

Arizona employers, educators and future job seekers are some of the groups that should benefit from a report on projected wage-and-salary employment and self-employment in the state in the year 2,000.

Appropriately titled, "Year 2000 Employment Projections -- State of Arizona -- With Estimates of Self-Employment," the study includes employment estimates for 750 occupations. Agricultural employment, however, was excluded from the report, issued in October by the Occupational Information System (OIS) of Arizona, a project of the Arizona State Occupational Information Coordinating Committee (ASOICC).

The OIS report projected occupational employment for the year 2000 by calculating annual compounded growth for each occupation during a 1988-1993 period, then extending the data to the year 2000. (The 1988-1993 projections had been previously derived from the Occupational Employment Statistics (OES) program.) The growth rates were then benchmarked to a total employment figure provided by an econometric model. The self-employment data are based on 1980 U.S. Census figures.

The report is broken into three parts, in order to present the data in three forms -- in OES code sequence, alphabetically, and by the number of employed in an occupation (largest to smallest). Among data in each section are wage-and-salary employment and self-employment estimates for the years 1988, 1989 and 2000, plus expected job growth and opportunities in each occupation.

To obtain a free copy of the report, call 542-3871, or write to the address on the back of the newsletter requesting OIS Report 88-9.

TABLE 1

OES OCCUPATIONAL TITLE	Wage-and-Salary Employment & Self-Employment 1988	2000	Self-Emp. As Percent Of Total Emp.*	Self-Employeamnt 1988	2000
All Other Health Diagnosing and Treating Practitioners	167	262	44.9	75	117
Podiatrists	86	131	43.0	37	56
Dentists	2195	3350	42.9	941	1436
Optometrists	517	792	42.9	222	340
Veterinarians and Veterinary Inspectors	27	33	37.0	10	12
Barbers	653	1115	35.7	233	398
Lawyers	8113	13407	32.9	2666	4406
Shoe & Leather Workers & Repairers	113	189	32.7	37	62
Physicians and Surgeons	7950	11895	32.1	2550	3816
Artists and Commercial Artists	1658	2812	31.9	529	897
Architects (Exc. Landscape and Marine)	1829	3178	31.4	575	999
Landscape Architects	128	213	31.3	40	67
Funeral Directors and Morticians	265	455	29.1	77	132
Precision Patternmakers, Model Makers, Layout Work	56	82	28.6	16	23
Camera Operators, Television & Motion Picture	113	173	28.3	32	49
Jewelers and Silversmiths	505	885	28.3	143	251
Photographers	864	1449	27.8	240	402
Hand Workers, Jewelery and Related Prod.	72	108	27.8	20	30
Locksmiths and Safe Repairers	259	459	26.6	69	122
Stenographers	1231	1835	25.8	318	474
Musicians (Instrumental)	1487	2618	25.6	380	669
1st Line Supervisors and Manager/ Supervisors, Sales	23248	38103	25.3	5878	9634
Camera and Photographic Equip. Repairers	64	98	25.0	16	24
Musical Instrument Repairers and Tuners	64	113	25.0	16	28

* Self-employment percentage is based on 1980 Census figures.

Self-Employed Compared to Total Employment

Occupations with a higher probability for self-employment are those with a high percentage of self-employed. Table 1 (see above) ranks occupations in Arizona by their proportion of self-employed to overall employment. For example, the occupation with the highest percentage of self-employed is the catchall "Other" category of Health Diagnosing and Treating Practitioners -- with 44.9 percent. The largest job group in this classification is chiropractor.

More specific is the second-ranked self-employed occupation of Podiatrists -- at 43.0 percent. Not surprisingly, Podiatrists, as well as many others at the top of this list, are professional occupations requiring college or graduate-level education. In fact, 10 of the 24 occupations having 25 percent or more self-employed are professional jobs. The highest ranked occupation requiring only high school, community college or proprietary college education is Barbers. Nearly 36 percent of barbers are self-employed.

Total Number of Self-Employed Jobs

If someone preferred self-employment to wage or salary employment, or if vocational education and job-training planners were offering training that led to self-employment, the previous list of occupations would be valuable. More telling, however, may be a list of jobs with the total number of self-employed.

Table 2 ranks occupations in Arizona by the projected number of self-employed in the year 2000. As in Table 1, many of the top-ranked jobs are professional positions, usually requiring four or more years of col-

(Continued on Page 4)

TABLE 2

OES OCCUPATIONAL TITLE	Self-Employment 1988	2000
General Manager and Top Executives	6231	10286
1st Line Supervisors & Manager/Supervisors, Sales	5878	9634
Salespersons, Retail	5285	8456
Lawyers	2666	4406
Physicians and Surgeons	2550	3816
Others Sales Representatives, Executive Retail	1936	3307
All Other Managers and Administrators	1829	2911
Bookkeeping, Accounting and Auditing Clerks	1713	2778
Automotive Mechanics	1672	2663
Carpenters	1654	2652
Financial Managers	1571	2547
Hairdressers, Hairstylists and Cosmetologists	1394	2375
Teachers and Instructors, Vocational Education and Training	1746	2334
Gardners and Groundkeepers (Exc. Farm)	1419	2313
Food Service and Lodging Managers	1150	2067
Accountants and Auditors	1238	2000
1st Line Supervisors, Mechanics, Installers, Repairers	1217	1898
Janitors and Cleaners	943	1490
Insurance Sales Workers	912	1464
Stock Clerks, Sales Floor	896	1441
Dentists	941	1436
Sales Agents, Real Estate	868	1423
Truck Drivers, Heavy or Tractor Trailer	869	1401
Maintenance Repairers, General Utility	806	1277
Painters and Paperhangers, Construction and Maintenance	834	1225
Cabinetmakers and Bench Carpenters	703	1163
Sales Reps, Scientific Products and Services (Exc. Retail)	653	1155
Teachers, Special Education	879	1153
Electromechanical Equipment Assemblers, Precision	711	1152
All Other Service Supervisors and Manager/Supervisors	663	1063
Construction Managers	646	1060
Securities and Financial Services Sales Workers	649	1049
Instructors and Coaches, Sports and Physical Training	638	1046
Personnel, Training, and Labor Relations Specialists	653	1008

lege education. The top five in this list include: General Managers and Top Executives, First Line Supervisors and Managers of Sales, Lawyers, Physicians and Surgeons, and Others Sales Representatives.

Many of the traditional vocational education occupations, though, appear high on this list. There are 13 occupations expected to have 1,000 self-employed jobs in the year 2000, for which one can prepare by enrolling in vocational education courses or apprenticeships. Among these are: Bookkeeping, Accounting, and Auditing Clerks; Automotive Mechanics; Carpenters; Hairdressers, Hairstylists and Cosmetologists; and Gardeners and Groundskeepers.

Having many traditional vocational education occupations ranked high on a list of self-employed jobs speaks well for vocational education training and the fact that vocational education offers the opportunity for self-employment as well as mastering specific work skills. It also adds an element of new information to the discussion of vocational education "accountability" that is currently being waged in Arizona and in the United States.

Although the opportunities for self-employment in Arizona appear bright, the fact that some of the occupations listed in Table 2 are on commission should not be overlooked. Most notable among these occupations are: Real Estate Sales Agents, Retail Salespersons, Insurance Sales Workers, and Securities and Financial Services Sales Workers.

Employment: Self and Wage-and-Salary

A question often asked by vocational education and job-training planners is: Would the addition of self-employed to wage-and-salary employment substantially alter a demand ranking list? Comparing Table 3 to Table 4 perhaps answers that question.

Table 3 lists Arizona's top 25 occupations based on combined forecasted wage-and-salary employment and self-employment in the year 2000. Table 4 ranks occupations by

(Continued on Page 5)

TABLE 3

OES OCCUPATIONAL TITLE	Wage-and-Salary Employment & Self-Employment 1988	2000	Self-Emp. As Percent Of Total Emp.*	Self-Emp. 2000
Salesperson, Retail	56545	90470	9.3	8456
General Managers and Top Executives	38667	63832	16.1	10286
Waiters and Waitresses	30383	54697	0.6	332
General Office Clerks	31036	49494	1.9	937
Secretaries	30102	47191	0.0	0
Bookkeeping, Accounting and Auditing Clerks	28985	47020	5.9	2778
Cashiers	28920	46741	1.5	709
Food Preparation and Service Workers, Fast Food	24782	45874	1.8	847
1st Line Supervisors and Manager/Supervisor, Sales	23248	38103	25.3	9634
Janitors and Cleaners	23502	37146	4.0	1490
Registered Nurses	24374	36873	1.9	688
All Other Helpers, Laborers and Material Movers	21787	35609	2.8	997
Other Sales Representatives (Exc. Retail)	19715	33677	9.8	3307
Teachers, Elementary School	22045	28543	0.0	0
Food Preparation Workers	15015	25827	0.8	195
Carpenters	13896	22281	11.9	2652
Truck Drivers, Heavy or Tractor Trailer	13666	22037	6.4	1401
Truck Drivers, Light (Incl. Delivery and Route Workers	12960	21919	4.4	964
Maintenance Repairers, General Utility	13780	21843	5.8	1277
1st Line Supervisors, Manager/Supervisors, Clerical	13371	21259	2.0	415
Automotive Mechanics	12583	20045	13.3	2663

* Self-employment percentage is based on 1980 Census figures.

only the forecasted wage-and-salary employment in the year 2000. The two tables are remarkably similar with a few occupations moving up or down one or two places.

The lists displayed in Tables 1, 2, 3 and 4 were generated by the microcomputer OIS of Arizona. The tables listed here, however, are only the top portion of 750 occupations OIS listed in its report. Nevertheless, these tables demonstrate the value of looking at occupational demand in multiple ways. Vocational education and job-training planners who take advantage of these OIS capabilities will make better-informed decisions about the kind of training to offer in their programs.

--Ron Simon

TABLE 4

OES OCCUPATIONAL TITLE	Wage and Salary Employment 1988	2000
Salespersons, Retail	51260	82014
Waiters and Waitresses	30199	54365
General Managers and Top Executives	32436	53546
General Office Clerks	30448	48557
Secretaries	30102	47191
Cashiers	28481	46032
Food Preparation and Service Workers, Fast Food	24325	45027
Bookkeeping, Accounting and Auditing Clerks	27272	44242
Registered Nurses	23920	36185
Janitors and Cleaners	22559	35656
All Other Helpers, Laborers, and Material Movers, Hand	21177	34612
Other Sales Representatives (Exc. Retail)	17779	30370
Teachers, Elementary School	22045	28543
1st Line Supervisors and Manager/Supervisors, Sales	17370	28469
Food Preparation Workers	14902	25632
Truck Drivers, Light (Incl. Delivery and Route Workers)	12390	20955
1st Line Supervisors and Manager/Supervisors, Clerical	13110	20844
Truck Drivers, Heavy or Tractor Trailer	12797	20636
Maintenance Repairers, General Utility	12974	20566
Carpenters	12242	19629
Stock Clerks, Stockroom, Warehouse or Yard	11708	18751
Freight, Stock, and Material Movers, Hand	10962	17838
Guards	10456	17502
Receptionists and Information Clerks	10798	17471
Automotive Mechanics	10911	17382

Most Rural Areas Given "Labor Surplus" Status

The U.S. Department of Labor has classified 15 civil jurisdictions in Arizona as "labor surplus areas" for the Federal Fiscal Year, beginning Oct. 1, 1988, and ending Sept. 30, 1989. The "labor surplus" designation affects every city and county in the state outside Pima, Maricopa and Yavapai counties. (See listing at bottom of page.)

A labor surplus designation means employers can receive preference in federal contract bids if they perform more than 50 percent of the contract work within these areas. The reasoning behind this is to funnel federal procurement dollars into communities with high unemployment.

Cities with a population of at least 25,000 and all counties qualify as a labor surplus area if their unemployment rate is 20 percent higher than the national average during the previous two calendar years. In this case, civil jurisdictions that had an unemployment rate of 8 percent or higher during the period of January 1986 through December 1987 qualified as labor surplus areas. The national unemployment rate during that period was 6.7 percent.

Jurisdictions can also be classified as labor surplus areas under "exceptional circumstance" criteria if unemployment rates rise dramatically because of plant closures, contract cancellations, natural disasters and other unforeseen circumstances. The Department of Labor continues to add labor surplus areas under the "exceptional circumstance" provision during the entire fiscal-year period.

The Department of Labor designates labor surplus areas on an annual basis, beginning October 1 of each year and ending September 30 of the following year. A complete listing -- including updates -- is published in *Area Trends in Employment and Unemployment*, a labor department monthly publication. Cost is $25 for a yearly subscription and $3 for a single issue. To order the publication, write or call the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402; (202) 783-3238.

Employers in labor surplus areas who are interested in bidding on federal contracts should consult the *Commerce Business Daily*, a U.S. Department of Commerce periodical that lists federal contract requirements and projects to be awarded under preference procedures.

ELIGIBLE LABOR SURPLUS AREAS	CIVIL JURISDICTIONS INCLUDED
Apache County	Apache County
Balance of Cochise County	Cochise County less Sierra Vista (city)
Balance of Coconino County	Coconino County less Flagstaff (city)
Flagstaff (city)	Flagstaff (city) in Coconino County
Gila County	Gila County
Graham County	Graham County
Greenlee County	Greenlee County
La Paz County	La Paz County
Mohave County	Mohave County
Navajo County	Navajo County
Pinal County	Pinal County
Santa Cruz County	Santa Cruz County
Sierra Vista (city)	Sierra Vista (city) in Cochise County
Balance of Yuma County	Yuma County less Yuma (city)
Yuma (city)	Yuma (city) in Yuma County

The Arizona Labor Force in October

The state's unemployment rate extended its upward climb in October, rising to 7.0 percent. The U.S rate, on the other hand, dipped slightly to 5.3 percent. The Arizona unemployment rate has not surged as far above the U.S. rate since mid-year 1976. The state's rising rate is mostly attributable to sluggish job creation.

Seasonality was the key to the employment situation in October, as most of the 12,500 increase in wage-and-salary employment occurred in industries gearing up for the holiday and winter visitor seasons. Gains in these industries were offset by losses in Manufacturing and Construction -- industries traditionally slack this time of year.

In anticipation of the holiday shopping season, retailers added 2,900 workers to their payrolls. On a seasonally adjusted basis this gain is modest, indicating that merchants are maintaining a cautious -- rather than optimistic -- outlook toward the future. Retailers, however, could benefit from two more shopping days that fall between Thanksgiving and Christmas this year, compared to last year's 28-day shopping season.

Tourist-related services are also getting a seasonal boost as the industry gears up for the influx of winter visitors. Overall, 2,100 new jobs were added in Services and Miscellaneous with the largest gains going to hotels and lodging, amusements, and "other" services categories. This gain, paired with last month's, is a harbinger for healthy winter-tourism activity.

The Transportation, Communications, and Public Utilities sector also showed seasonal gains with Transportation expanding for its busy period. In October, 300 jobs were added, with more additions expected through year-end. Communications and Public Utilities remained flat for the month.

The largest gains for the month were found in school employment. More than half of the monthly increase -- 7,700 jobs -- was added in this sector as schools increased their staff levels, and work-study students were added to university and college payrolls.

Manufacturing, on the down side of seasonal activity, dropped 400 jobs in October. The majority of these losses were found in the high-tech-related machinery sector of Manufacturing. Over the year, growth in Manufacturing comes in at less than 1 percent. This sluggish pace is expected to continue into next year.

Construction employment slid for the second month after a summer upswing, with another 500 jobs lost. The prognosis is gloomy for this industry, which shows no signs of improving, particularly in light of rising interest rates and inmigration slowing to a trickle. The decline, or correction phase, in this industry is anticipated to extend through most of 1989.

Echoing the conditions in Construction, the Finance, Insurance, and Real Estate (FIRE) sector dropped another 200 employees in October. The slump in FIRE now stretches to 11 months. Over the year, employment in FIRE has fallen 4.2 percent and will not improve until Construction rebounds.

Other industries exhibiting significant losses for the month of October were Mining and Quarrying, and the business services sector of Services and Miscellaneous. Mining, after showing stable growth most of the

(Continued on Page 12)